OK Autrod 19.49

A continuous solid Cu-Ni wire for welding of similar alloys like 90Cu10Ni-, 80Cu20Ni- and 70Cu30Ni-alloys. The nickel addition strengthens the weld metal and improves the corrosion resistance, particulary against salt water. The alloy is used for overlay welding of steels and widely used for welding of Cu-Ni components to desalination plants.

Specifications	
Classifications	EN ISO 24373 SFA/AWS A5.7 : ERCuNi EN 14640 : S Cu 7158 (CuNi30)

Alloy Type	Alloyed copper (Cu + 30 % Ni)
Shielding Gas	I1, I2, I3 (EN 439)

Tensile_Properties			
Testing Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
As Welded	180 MPa	350 MPa	40 %

Typical Wire Composition %					
C	**Mn**	**Si**	**Ni**	**Cu**	**Fe**
0.02	0.7	0.05	31	Bal	0.5

Typical Weld Metal Analysis %						
Mn	**Si**	**P**	**Ni**	**Al**	**Pb**	**Fe**
0.8	0.05	0.04	31	0.001	0.005	0.6

Welding_Parameters			
Amps	**Wire Diameter**	**Volts**	**Wire Feed Speed**
60-165 A	0.8 mm	13-17.5 V	4.0-13.0 mm/min
80-210 A	1.0 mm	12.5-18 V	4.0-12.0 mm/min
150-320 A	1.2 mm	16-29 V	5.0-11.5 mm/min